

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:		<p>DATE OF MAILING (day/month/year)</p>	
Applicant's or agent's file reference NEG-425PCT		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/JP2005/000345	International filing date (day/month/year) 14.01.2005	Priority date (day/month/year) 23.01.2004	
International Patent Classification (IPC) or both national classification and IPC			
Applicant NEC CORPORATION			

1. This opinion contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the opinion
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000345

Box No. 1

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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INTERNATIONAL SEARCHING AUTHORITY

International application No.

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Box No. IV Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:

- ☒ paid additional fees
☐ paid additional fees under protest
☐ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with
☒ not complied with for the following reasons:

The feature common to claims 1-44 is to control the operation of a motion-image encoding and transmission apparatus based on the control information from the receiving side. However, the above-mentioned common feature is well known, as disclosed in JP, 2002-537736, A (Nokia Mobile Phones Ltd.), 5 November, 2002 (05.11.02), paragraphs [0014]-[0018] and [0030]-[0040], and therefore, is not novel.

As a result, the above-mentioned common feature is not beyond the scope of the prior art, and cannot be a special technical feature in the sense of the second sentence of PCT Rule 13.2.

There are, therefore, no features common to all the claims.

There are no other features common to them that may be considered as a special technical feature in the sense of the second sentence of PCT Rule 13.2; and therefore, no technical relationship in the sense of PCT Rule 13 is found among the subject matters of those claims.

Consequently it is apparent that claims 1-12, 40 and 42, claims 13-19 and 43, claims 20-26 and 44, and claims 27-39 and 41 do not satisfy the requirement of unity of invention.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

- ☒ all parts
☐ the parts relating to claims Nos. _____

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000345

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2, 5, 6, 11-26, 28-39, 43, 44	YES
	Claims	1, 3, 4, 7-10, 27, 40-42	NO
Inventive step (IS)	Claims		YES
	Claims	1-44	NO
Industrial applicability (IA)	Claims	1-44	YES
	Claims		NO

2. Citations and explanations:

Document 1: JP, 2002-537736, A (Nokia Mobile Phones Ltd.), 5 November, 2002 (05.11.02), paragraphs [0014]-[0018] and [0030]-[0040]

Document 2: JP, 2002-34021, A (Mitsubishi Electric Corp.), 31 January, 2002 (31.01.02), paragraphs [0025]-[0027]

Document 3: A Consideration of Multi-point Video Communication System in a Broadband Network Environment, (Takashi Goto, Yoji Kurusu, Fumihiko Ito, and Norio Tamaki), Reports to The Institute of Electronics, Information and Communication Engineers, 6 December, 2002 (06.12.02), Vol. 102, No. 498, pages 7-12

Document 4: A Research and Development of H. 323-SIP Gateway System, (Hiroyuki Kasai and Hideyoshi Tominaga), Reports to Information Processing Society of Japan, 8 March, 2002 (08.03.02), Vol. 2002, No. 25, AVN-36, pages 53-58

Document 5: JP, 3095526, U (K.K. Alfa Systems), 8 August, 2003 (08.08.03), paragraphs [0019]

Document 6: JP, 2003-143219, A (Matsushita Electric Industrial Co., Ltd.), 16 May, 2003 (16.05.03), full text, all drawings

Document 7: JP, 10-200897, A (Nippon Telegraph and Telephone Corp.), 31 July, 1998 (31.07.98), full text, all drawings

Document 8: JP, 6-217282, A (NEC Corp.), 5 August, 1994 (05.08.94), full text, all drawings

Document 9: JP, 7-298272, A (Canon Inc.), 10 November, 1995 (10.11.95), full text, all drawings

Document 10: JP, 10-164143, A (Hitachi, Ltd.), 19 June, 1998 (19.06.98), Fig. 2

Document 11: Wireless Gateway for Wireless Home AV Network and Its Implementation, (Takeshi Saito, Ichiro Tomoda, Yoshiaki Takabatake, Keiichi Teramoto, and Kensaku Fujimoto), IEEE Transactions on Consumer Electronics, August 2001, Vol. 47, Issue: 3, pages 496-501

The subject matters of claims 1, 3, 4, 7-10, 40 and 42 are described in document 1 cited in the ISR, and so, do not appear to be novel or involve an inventive step.

The subject matter of claim 2 does not appear to involve an inventive step in view of document 1 and document 2 cited in the ISR. A person skilled in the art could have easily made a

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INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000345

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

constitution of the invention described in document 1 wherein control information is transmitted at predetermined intervals as described in document 2.

The subject matters of claims 5, 6, 11 and 12 do not appear to involve an inventive step in view of document 1 and documents 3-5 cited in the ISR. Using SIP in motion-image communication was well known as described in documents 3-5, and therefore, a person skilled in the art could have easily adopted SIP in place of H.245 in the invention described in document 1.

The subject matters of claims 13-17 and 43 do not appear to involve an inventive step in view of document 1 and document 6 cited in the ISR. A person skilled in the art could have easily made a constitution of the invention described in document 1 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6.

The subject matters of claims 18 and 19 do not appear to involve an inventive step in view of document 1 and documents 3-6. A person skilled in the art could have easily made a constitution of the invention described in document 1 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6, and SIP is adopted as the transmission protocol, as described in documents 3-5.

The subject matters of claims 20-22 and 44 do not appear to involve an inventive step in view of documents 7 and documents 8 and 9 cited in the ISR. A person skilled in the art could have easily made a constitution of the invention described in document 7 wherein the band for transmission is calculated from transmitted bit streams, as described in documents 8 and 9.

The subject matters of claims 23-26 do not appear to involve an inventive step in view of document 7 and documents 4, 5, 8 and 9. A person skilled in the art could have easily made a constitution of the invention described in document 7 wherein the band for transmission is calculated from transmitted bit streams, as described in documents 8 and 9, and H.245 or SIP is adopted as the transmission protocol, as described in documents 4 and 5.

The subject matters of claims 27 and 41 are described in documents 10 and 11, and so, do not appear to be novel or involve an inventive step.

The subject matter of claim 28 does not appear to involve an inventive step in view of documents 10 and 11 and document 2. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein the control information is transmitted at predetermined intervals, as described in document 2.

The subject matters of claims 29-32 do not appear to involve an inventive step in view of documents 10 and 11 and documents 4 and 5. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein H.245 or SIP is adopted as the transmission protocol, as described in documents 4 and 5.

The subject matters of claims 33-35 do not appear to involve an inventive step in view of documents 10 and 11 and document 6. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6.

The subject matters of claims 36-39 do not appear to involve an inventive step in view of documents 10 and 11 and documents 4-6. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6, and H.245 or SIP is adopted as the transmission protocol, as described in documents 4 and 5.

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International application No.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 1-42 do not clarify any matters concerning the deterioration of images, so it is unclear what problems the subject matters of claims 1-42 can solve.

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TRANSLATION

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INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

NEG-425PCT

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2005/000345

International filing date (day/month/year)

14.01.2005

Priority date (day/month/year)

23.01.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant

NEC CORPORATION

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input checked="" type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/IP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000345

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000345

Box No. IV

Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:

- ☒ paid additional fees
☐ paid additional fees under protest
☐ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with
☒ not complied with for the following reasons:

The feature common to claims 1-44 is to control the operation of a motion-image encoding and transmission apparatus based on the control information from the receiving side.

However, the above-mentioned common feature is well known, as disclosed in JP, 2002-537736, A (Nokia Mobile Phones Ltd.), 5 November, 2002 (05.11.02), paragraphs [0014]-[0018] and [0030]-[0040], and therefore, is not novel.

As a result, the above-mentioned common feature is not beyond the scope of the prior art, and cannot be a special technical feature in the sense of the second sentence of PCT Rule 13.2.

There are, therefore, no features common to all the claims.

There are no other features common to them that may be considered as a special technical feature in the sense of the second sentence of PCT Rule 13.2; and therefore, no technical relationship in the sense of PCT Rule 13 is found among the subject matters of those claims.

Consequently it is apparent that claims 1-12, 40 and 42, claims 13-19 and 43, claims 20-26 and 44, and claims 27-39 and 41 do not satisfy the requirement of unity of invention.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

- ☒ all parts
☐ the parts relating to claims Nos. _____

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000345

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2, 5, 6, 11-26, 28-39, 43, 44	YES
	Claims	1, 3, 4, 7-10, 27, 40-42	NO
Inventive step (IS)	Claims		YES
	Claims	1-44	NO
Industrial applicability (IA)	Claims	1-44	YES
	Claims		NO

2. Citations and explanations:

Document 1: JP, 2002-537736, A (Nokia Mobile Phones Ltd.), 5 November, 2002 (05.11.02), paragraphs [0014]-[0018] and [0030]-[0040]

Document 2: JP, 2002-34021, A (Mitsubishi Electric Corp.), 31 January, 2002 (31.01.02), paragraphs [0025]-[0027]

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Document 6: JP, 2003-143219, A (Matsushita Electric Industrial Co., Ltd.), 16 May, 2003 (16.05.03), full text, all drawings

Document 7: JP, 10-200897, A (Nippon Telegraph and Telephone Corp.), 31 July, 1998 (31.07.98), full text, all drawings

Document 8: JP, 6-217282, A (NEC Corp.), 5 August, 1994 (05.08.94), full text, all drawings

Document 9: JP, 7-298272, A (Canon Inc.), 10 November, 1995 (10.11.95), full text, all drawings

Document 10: JP, 10-164143, A (Hitachi, Ltd.), 19 June, 1998 (19.06.98), Fig. 2

Document 11: Wireless Gateway for Wireless Home AV Network and Its Implementation, (Takeshi Saito, Ichiro Tomoda, Yoshiaki Takabatake, Keiichi Teramoto, and Kensaku Fujimoto), IEEE Transactions on Consumer Electronics, August 2001, Vol. 47, Issue: 3, pages 496-501

The subject matters of claims 1, 3, 4, 7-10, 40 and 42 are described in document 1 cited in the ISR, and so, do not appear to be novel or involve an inventive step.

The subject matter of claim 2 does not appear to involve an inventive step in view of document 1 and document 2 cited in the ISR. A person skilled in the art could have easily made a

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000345

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

constitution of the invention described in document 1 wherein control information is transmitted at predetermined intervals as described in document 2.

The subject matters of claims 5, 6, 11 and 12 do not appear to involve an inventive step in view of document 1 and documents 3-5 cited in the ISR. Using SIP in motion-image communication was well known as described in documents 3-5, and therefore, a person skilled in the art could have easily adopted SIP in place of H.245 in the invention described in document 1.

The subject matters of claims 13-17 and 43 do not appear to involve an inventive step in view of document 1 and document 6 cited in the ISR. A person skilled in the art could have easily made a constitution of the invention described in document 1 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6.

The subject matters of claims 18 and 19 do not appear to involve an inventive step in view of document 1 and documents 3-6. A person skilled in the art could have easily made a constitution of the invention described in document 1 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6, and SIP is adopted as the transmission protocol, as described in documents 3-5.

The subject matters of claims 20-22 and 44 do not appear to involve an inventive step in view of documents 7 and documents 8 and 9 cited in the ISR. A person skilled in the art could have easily made a constitution of the invention described in document 7 wherein the band for transmission is calculated from transmitted bit streams, as described in documents 8 and 9.

The subject matters of claims 23-26 do not appear to involve an inventive step in view of document 7 and documents 4, 5, 8 and 9. A person skilled in the art could have easily made a constitution of the invention described in document 7 wherein the band for transmission is calculated from transmitted bit streams, as described in documents 8 and 9, and H.245 or SIP is adopted as the transmission protocol, as described in documents 4 and 5.

The subject matters of claims 27 and 41 are described in documents 10 and 11, and so, do not appear to be novel or involve an inventive step.

The subject matter of claim 28 does not appear to involve an inventive step in view of documents 10 and 11 and document 2. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein the control information is transmitted at predetermined intervals, as described in document 2.

The subject matters of claims 29-32 do not appear to involve an inventive step in view of documents 10 and 11 and documents 4 and 5. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein H.245 or SIP is adopted as the transmission protocol, as described in documents 4 and 5.

The subject matters of claims 33-35 do not appear to involve an inventive step in view of documents 10 and 11 and document 6. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6.

The subject matters of claims 36-39 do not appear to involve an inventive step in view of documents 10 and 11 and documents 4-6. A person skilled in the art could have easily made a constitution of the inventions described in documents 10 and 11 wherein the intervals at which requests are sent to the encoding side are controlled according to the band for transmission, as described in document 6, and H.245 or SIP is adopted as the transmission protocol, as described in documents 4 and 5.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 1-42 do not clarify any matters concerning the deterioration of images, so it is unclear what problems the subject matters of claims 1-42 can solve.